REMARKS

Claims 1-10, 12-13 and 22-27 are pending. Claims 1, 4-10 and 12-13 have been amended. Claims 22-27 have been added. Claims 11 and 14-21 have been cancelled. In view of the following, all of the claims are in condition for allowance. If, after considering this response, the Examiner does not agree that all of the claims are allowable, then it is respectfully requested that the Examiner schedule a teleconference with the Applicant's attorney to further the prosecution of the application.

Rejection of claims 4 and 9 under §112, second paragraph, as being indefinite

The required clarifications have been made.

Rejection of claims 1-3 under §102(e) as being anticipated by Verlinden et al. (US 6,861,136)

Claim 1

Claim 1, as amended, recites wells disposed on a substrate and operable to hold respective conductive polymers that form circuit devices that can be interconnected to form an electronic circuit.

For example, referring, *e.g.*, to FIGS. 2-4b and paragraphs 17-25 of the present application, wells (8) are disposed on a substrate (7) and are operable to hold respective conductive polymers that form circuit devices (*e.g.*, a transistor 14) that can be interconnected (*e.g.*, by a connection layer 9) to form an electronic circuit. It should be noted that the conductive polymer circuit devices are actually formed in the wells (8).

Verlinden et al., on the other hand, does not disclose wells disposed on a substrate and operable to hold respective conductive polymers that form circuit devices that can be interconnected to form an electronic circuit. Verlinden et al., at, *e.g.*, FIG. 1 and col. 3, lines 21-27, discloses a plastic support (1), glass sheets (2), and spaces (3). However, as shown clearly in FIG. 1 and disclosed in col. 3, lines 23-27, the spaces (3) simply function as guides so that the plastic support (1) can be cut along the spaces (3) using common tools. This has nothing to do with wells operable to hold respective

conductive polymers that form circuit devices. In fact, the spaces (3) do not hold anything, they merely separate the glass sheets (2). Furthermore, the spaces (3) do not contribute to interconnecting circuit devices to form an electronic circuit because the very purpose of the spaces (3) is to separate the glass sheets (2) and provide a guide to cut the plastic support (1) apart. Therefore, claim 1 is not anticipated by Verlinden et al.

Claims 2-3

Claims 2-3 are patentable by virtue of their dependency from independent claim 1.

Rejection of claims 4-13 under §103(a) as being unpatentable over Jacobsen et al. in view of Verlinden et al.

Claim 4

Claim 4, as amended, recites a chemical treatment disposed on regions of a substrate and operable to limit the sizes of conductive-polymer dots printed onto the regions.

For example, referring, *e.g.*, to paragraph 26 of the present application, regions of a substrate (7) may be chemically treated to limit the sizes of conductive-polymer dots printed onto the regions. The chemical treatment may limit the sizes of the conductive-polymer dots by preventing splatter, bleeding, or spreading.

Jacobsen et al., on the other hand, does not disclose, teach or suggest a chemical treatment disposed on regions of a substrate and operable to limit the sizes of conductive-polymer dots printed onto the regions. In fact, after reviewing Jacobsen et al. in its entirety, the Applicant's attorney is unable to find any mention of chemically treating regions of a substrate, limiting the sizes of conductive-polymer dots, or printing conductive-polymer dots. Therefore, modifying the teachings of Jacobsen et al. by incorporating the teachings of Verlinden et al. (an electroluminescent polymer such as PPV) would not satisfy the limitations of claim 4.

Claim 5

Claim 5 recites conductive polymer dots disposed on a substrate in predetermined locations, and a connection layer that interconnects the dots to form a circuit.

For example, referring, *e.g.*, to FIGS. 2-4b and paragraphs 17-26 of the present application, conductive polymer dots are disposed on a substrate (7) in predetermined locations (*e.g.*, in wells 8), and a connection layer (9) interconnects the dots to form a circuit. It should be noted that, as described in the present application, the conductive polymer dots are deposited as a liquid on the substrate (7).

Jacobsen et al., on the other hand, does not disclose, teach or suggest polymer dots disposed on a substrate in predetermined locations, and a connection layer that interconnects the dots to form a circuit. Jacobsen et al., at, *e.g.*, FIGS. 1a-4 and col. 2, lines 6-17, discloses a substrate (12) and a plurality of blocks (14). However, each block (14) is a prefabricated circuit block that may contain driver circuitry, *e.g.*, a MOSFET and capacitor (col. 2, lines 14-15), or even functional components such as LEDs, pixel drivers, sensors, etc (col. 2, lines 45-48). There is no suggestion to substitute the blocks (14) for conductive polymer dots as described in the present application. Although the blocks (14) may be deposited by a FSA process, this says nothing about the actual blocks (14) themselves, and clearly has nothing to do with substituting prefabricated circuit blocks (14) containing driver circuitry or functional components for conductive polymer dots as described in the present application. Therefore, modifying the teachings of Jacobsen et al. by incorporating the teachings of Verlinden et al. (an electroluminescent polymer such as PPV) would not satisfy the limitations of claim 5.

Claims 6-9

Claims 6-9 are patentable by virtue of their dependency from independent claim 5.

Claim 10

Claim 10, as amended, recites a circuit sheet comprising one and only one substrate, and transistors disposed on the substrate and formed from a conductive polymer, wherein the transistors are isolated from one another and are operable to be interconnected to form an electronic circuit.

For example, referring, *e.g.*, to FIGS. 4a-6 and paragraphs 22-29 of the present application, transistors (16-22 and 38) are disposed on one and only one substrate (7) and are formed from a conductive polymer, wherein the transistors (16-22 and 38) are isolated from one another and are operable to be interconnected (e.g., by a connection layer 9) to form an electronic circuit.

Jacobsen et al., on the other hand, does not disclose, teach or suggest a circuit sheet comprising one and only one substrate, and transistors disposed on the substrate and formed from a conductive polymer, wherein the transistors are isolated from one another and are operable to be interconnected to form an electronic circuit. As conceded by the Examiner on page 5 of the Office Action, Jacobsen et al. does not teach that the blocks (14) are formed from a conductive polymer.

In Verlinden et al., typical OLEDs are described wherein an electroluminescent polymer such as PPV may be used (col. 8, lines 6-35). However, Verlinden et al. only teaches OLEDs wherein functional layers are present between two substrates (col. 8, lines 23-24). There is no teaching of a circuit sheet comprising conductive polymer transistors and one and one substrate layer. Therefore, modifying the teachings of Jacobsen et al. by incorporating the teachings of Verlinden et al. would not satisfy the limitations of claim 10.

Claim 12

Claim 12, as amended, is patentable for reasons similar to those recited above in support of the patentability of claim 10.

Claim 13

Claims 13 is patentable by virtue of its dependency from independent claim 1.

CONCLUSION

In light of the foregoing remarks, claims 1-10, 12-13 and 22-27 are in condition for allowance, which is respectfully requested.

In the event additional fees are due as a result of this amendment, you are hereby authorized to charge such payment to Deposit Account No. 07-1897.

If, after considering this response, the Examiner does not agree that all of the claims are allowable, then it is respectfully requested that the Examiner contact the Applicants' attorney, Bryan Santarelli, at (425) 455-5575.

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Respectfully submitted,

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